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Market Reform, Regional Energy and Popular Representation: Evidence from Post-Soviet Russia

Theocharis N. Grigoriadis and Benno Torgler*

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Abstract:

This article investigates the relative impact of regional energy production on the energy voting choices of State Duma deputies between 1994 and 2003, controlling for other factors such as party affiliation, electoral mandate, committee membership and socio-demographic parameters. We apply Poole's optimal classification method of roll call votes using an ordered probit model to explain energy market reform in the first decade of Russia's democratic transition. Our main finding is that the gas production factor is inter temporally important in the formation of the deputies' legislative choices and shows Gazprom's strategic position in the post-Soviet Russian economy. The oil production factor is variably significant in the two first Dumas, when the main legislative debates on oil privatization occur. The energy committee membership tends to consistently explain pro-reform voting choices. The pro-and anti-reform poles observed in our Poole-based single dimensional scale are not necessarily connected with liberal and state-oriented policies respectively.

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* Theocharis N. Grigoriadis, Moscow State Institute of International Relations (MGIMO), Russian Ministry of Foreign Affairs, Prospect Vernadskogo 76, 119454, Moscow, Russia, and The Delegation of the European Commission to the Russian Federation, Economic, Trade and Agriculture Section, Kadashevskaya Nab. 14/1, 119017, Moscow, Russia, email: theocharis.grigoriadis@ec.europa.eu, theocharis.grigoriadis@gmail.com; Benno Torgler, The School of Economics and Finance, Queensland University of Technology, GPO Box 2434, Brisbane, QLD 4001, Australia, CREMA Centre for Research in Economics, Management and the Arts, Switzerland, and CESifo Munich, email: benno.torgler@qut.edu.au. For helpful comments and suggestions, thanks are due to Fuad Aleskerov, Keith T. Poole, and Thomas Remington. We would also like to thank the Moscow-based INDEM Foundation for the generous provision of the roll call data. Please address all correspondence to Theocharis N. Grigoriadis.

I. Introduction

The formation of the State Duma was a crucial parameter of Russia's transition to democracy. It signalled a major shift in Russian political development and institutional structures, because it facilitated the emergence of new actors, seeking to set the rules of political play and, therefore, maximize their welfare. Market reform has been the outcome of presidential initiatives rather than proposals submitted by deputies (Mau 1998: 101-105). The State Duma is not an autonomous public policy player in Russian federal politics, because it is not able to enforce any policy measures without presidential approval; the reason for this is that the 1993 Constitution was designed by extra-constitutional actors with de facto executive authority. Still, the Duma is the most powerful internal constraint to presidential power both in pragmatic and constitutional terms.

Explaining the role of parliamentary institutions requires an analytical approach encompassing both individual strategies and collective interests. The economics of institutions proposes an equilibrium model, which defines institutional change in terms of objectives, the allocation of property rights and the reduction of transaction costs (Smith 2001: 10-15). This approach provides a conceptual framework for understanding the institutional dynamics leading to the creation of legislatures.

Why is it interesting to focus on Russia? The energy industry is the most important sector of the contemporary Russian economy. In 2002 it possessed one fourth of the GDP, one third of the industrial commodity production, one half of federal budget returns and more than 56 percent of Russian exports (Russian Bureau of Economic Analysis 2004). The management of energy resources has been a pillar of state economic policy and political competition in post-Soviet Russia. It has affected the comparative competitiveness of energy companies both at the domestic and the international level. For most of the energy companies, which were established in the privatization and post-privatization period, the transfer of public property was the result of a proper arrangement among pivotal centres of power: this was the case for

Lukoil and Surgutneftegas. Thus, it is highly relevant to assess the legislative politics of energy regulation. We can expect that powerful interest groups may influence the bargaining strategies of both sides: the executive and the legislative. Particularly in the case of Gazprom, the fact that it constitutes the world's biggest natural gas monopoly and exporter indicates the strategic importance of its reform; Gazprom's reform has to be in line with the projected increase in its natural gas exports and, thus, its further support of the federal budget. Looking at the past 10 years, one could hypothesize that the State Duma preferred to pursue a pro-state and anti-reformist agenda as opposed to the market-oriented agenda of the Russian Government.

The purpose of this paper is to elaborate on the legislative dimensions of market reform in the Russian energy sector. It focuses on the extrapolation of those resource factors that have determined legislative choices on energy regulation and privatization while controlling in a multivariate framework for several factors.

In addition, our paper provides several novel findings and a new methodological approach not seen, to our knowledge, in previous research. First, we observe a lack of empirical evidence in the field of energy regulation that investigates the impact of regional conditions on deputies' voting behaviour. Second, we work with a new data set that has not been substantially explored so far. Our data set allows investigating the First, Second and Third Duma, looking therefore at a relatively long and dynamic period. Each Duma provides a different setting due to a change in the profile of the respective energy roll call votes. Investigating all three Dumas also provides the great advantage of analysing the impact of regional conditions in diverse environments. Moreover, our data set includes a relatively rich set of control variables covering aspects such as deputies' party affiliation, electoral mandate, committee membership, gender and regional origin. We are also able to control for party switches during a Duma term. Finally, we provide in a novel manner a way to investigate quantitatively deputies' behaviour on a set of roll calls.

Our paper is organized as follows. In Section 2 the constitutional and political powers of the State Duma are presented and elaborated; the profile of major energy roll call votes between 1994 and 2003 is used as an explanatory pattern for understanding the parliamentary parameters of energy market reform in Russia. In Section 3, the literature review and the set of hypotheses are provided, while in Section 4 our hypotheses are operationalised by an econometric model and our methodology is clarified by the data evaluation process. Section 5 provides the empirical results and Section 6 finishes with some concluding remarks on the political and economic role of regional resources in energy regulation at the legislative level.

II. The Constitutional Role of the State Duma and the Profile of Energy Roll Call Votes on Key Issues

The State Duma is the main legislative body in Russia. All federal law bills must be submitted to the Duma and adopted with a majority vote before they are considered by the Council of Federation, the Upper Chamber of the Federal Assembly, and the President. In addition, the State Duma has major non-legislative capacities; it can appoint and dismiss the Chairman of the Russian Central Bank, the Human Rights Commissioner, and the Chairman of the Office of Auditors and half of its members (article 103 of the Russian Constitution). The State Duma confirms the appointment of the Prime Minister, although it does not have the power to confirm Government ministers. The State Duma passes a bill only when an absolute majority of the total number of its members votes for it in three consecutive readings. The energy roll calls of the First Duma entailed extensive negotiations on the ownership status and privatization of the oil and gas sector, handled issues of electricity tarification and supply, and instigated critical debates on the regulation of natural monopolies.

The deregulation of the Russian oil sector in the mid-1990s and the reform plans for Gazprom and RAO UESR, which continued to maintain a natural monopoly status in their main areas of economic activity, were debated issues in the State Duma. The respective bills became sources of intense multilevel bargaining, transcending institutional, political, and ideological boundaries. The preservation of Gazprom's monopoly and vertically integrated structure along with direct and detailed price regulation served the Government's long-term interests and protected consumers from arbitrary pricing. The division of the Russian electricity market into competitive and monopoly segments, as illustrated in the reform proposal adopted by the Duma in March 2003, enabled the state administration to grant the right of market entry and, thus, regulate market competition (Butyrkin 2003: 10-11).

The INDEM database (Satarov and Blagoveshenskii 2003) reports that for the 1994-1995 period the basic law drafts on energy policy were the following:[i] the bill on oil and gas, the bill on the regulation of natural monopolies and the bill on electricity tariffs. In all cases, when the amendments proposed by an opposition or pro-governmental deputy were accepted and subsequently incorporated to the bill, the roll call procedure was followed. Deputies were required to vote by majority for the amended bill in three consecutive readings before they forwarded it to the Federation Council. This may explain why the Federal Laws on Oil and Gas, Natural Monopolies and Electricity Tariffs constitute documents of great political value: not only do they reflect clashes of interests and ideological cleavages, which are strongly correlated with Russia's early transition to democracy. They also signal the emergence of powerful oil oligarchs whose entrepreneurial activities were central to the post-Soviet variety of state-led capitalism. The energy law bills in the First Duma were conceived and designed by the presidential administration; the lack of logrolling strategies or critical bill amendments by the communist or centrist opposition indicates the full-fledged dominance of President Yeltsin's policy set.

The implementation of radical economic reforms in 1994 and 1995 abruptly introduced the concepts of property rights and market organization. The reform of the oil sector was a key stage in the massive privatizations occurred in post-Soviet Russia. The State Duma voted for private access to public resources and linked market forces to state regulation (Nureev 2003 Part II: 116-118). Nevertheless, the use of executive decrees under article 90 of the 1993 Constitution and the confirmatory, rather than substantive, role of the Duma in policy-making deprived energy reforms of a solid democratic foundation (Moser 2001: 169). Reformers in the executive perceived the reform of the oil sector as their own privilege. In addition, the increased number of party fractions in the First Duma may have slowed down the legislative process, but it did not allow parliamentary minorities to manipulate energy roll call votes as veto opportunities against the government (Doering 2004: 90). The Federal Laws on Natural Monopolies, State Regulation of Energy Tariffs, and Gas Supply voted on in 1995 were efforts to develop an effective regulatory framework at the federal level (Tsapelik 2000: 5-6). However, most of those serious problems related to regulatory reform in the oil, gas and electricity sectors remained unresolved. In particular, the Federal Law on Natural Monopolies did not even encourage further investment activity in the energy sector.

In its second term, the Russian Duma evolved as an independent player and undertook major legislative initiatives on energy policy issues. Although President Yeltsin always retained the prerogative to dissolve the Duma and go to elections, the financial crisis of 1998 and Russia's domestic front in Chechnya did not leave sufficient margins for political moves. Tax obligations and the privatization of Gazprom, the privatization of Slavneft and Rosneft and the role of Anatolii Chubais in the nascent electricity reform constitute the political-economic axes of the legislative reform agenda.[ii] Specifically, the State Duma voted for a bill that prevented the disintegration of Gazprom, going against World Bank and International Monetary Fund proposals. By approving this law bill, the State Duma signalled its intention of keeping gas prices low and that way protecting Gazprom's state monopoly; it condemned the inflexible

fiscal policy against an important budget supporter and free-service provider to the population and production sector and invited the Russian Government to regulate Gazprom's arrears on the basis of domestic economic interests and national security (Satarov and Blagoveshenskii 2003).

The Communist opposition made substantial efforts to block the privatization of two oil companies which were still under state control: Rosneft and Slavneft. In the case of Rosneft, the State Duma asked the Government for access to the legal documents containing the conditions of privatization.[iii] As for Slavneft, a joint-venture owned by the Russian and Belarusian Governments, the opposition recommended that the Kremlin postpone its sale, wait until the parliamentary approval of a law bill regulating the privatization process, and negotiate with the Belarusian side on the company's operation.[iv] The sale of Sibneft's control packet to the Bank of New York was also the topic of a parliamentary session where the perils of US participation into oil production in Siberia were discussed.[v] In addition, a major political move of the Duma was to vote for the cancellation of Chubais's appointment as CEO of RAO UESR, Russia's electricity monopoly (Satarov and Blagoveshenskii 2003).

The Third Duma, which was elected in December 1999, continued to demonstrate its veto power over the key reform initiatives of the Government. The preference of the Duma majority for the preservation of RAO UESR as a natural monopoly was evident. This persistence on the negative role of Anatolii Chubais and his economic plan for RAO UESR became once again evident, when Duma deputies submitted an appeal to President Putin (July 7, 2000); they warned him that the break-up of RAO UESR into separate companies and the exclusive regulation of transportation tariffs would threaten the economic activity of small enterprises and put at risks the rights of their shareholders. The State Duma also voted for the enforcement of a new tariff system in the oil sector to make Russian oil companies, vertically integrated and structured as holdings, sell oil at the market price, and not at the lower domestic price.[vi]

The regulatory role of the Federal Energy Commission was harshly criticized in the beginning of the most important month for Russian electricity reform, February 2003 (Satarov and Blagoveshenskii 2003). Deputies underscored the fact that the Regional Energy Commissions had increased energy tariffs 14 percent over the legal limit and therefore violated article 1 of the respective law.[vii] They criticized Federal Energy Commission actions that ordered its regional counterparts to increase domestic energy prices and abandon cross subsidization.[viii] In their viewpoint, this decision exceeded the jurisdictional limits of the Federal Commission, because it was associated with deeply political implications. However, no law bill on energy policy in all 10 years of the Russian Duma was as contested as the law bill on electricity reform. Before its final approval on February 21, 2003, it received 70 amendments (Satarov and Blagoveshenskii 2003). Centrist deputies managed to insert an amendment that increased the state's controlling role during the reform period.

The Fatherland All-Russia party leader and Moscow Mayor Yuri Luzhkov, who was aligned with Putin's economic advisor Illarionov against Chubais, finally consented to the final reform project. The legislated amendments of the Russian Civil Code as well as of the Federal Law on Natural Monopolies constitute supplementary signals of the Duma's final agreement with the presidential reform; however, they do not diminish the political significance of the Duma's initial opposition to the project as well as its institutional role as the safeguard of Russian statehood.[ix] It can be inferred that the Russian legislature perceived energy reforms since 1996 as an effort of Russian and foreign corporate elites to consolidate their market power through the politicization of energy regulation (Shakhmalov 2003: 395-397).

In seeking to explain the regional resource dynamics of energy reform in post-Soviet Russia, one must bear in mind the difference between its institutional and political-economic dimension. The institutional dimension is connected with the formal actors involved in the decision-making process. The political-economic dimension of energy reform encompasses the regional component of energy regulation, but it also has a broader range. It must take into

account the multifaceted interactions of Russian deputies with influential business actors, not only at the local but also at the federal level; the latter usually intend to implement their own economic agenda by integrating their corporate strategies into larger political objectives.

III. Literature and Hypotheses

The role of interest groups in the formation of public policy decisions reached by legislative institutions has been extensively analysed in the literature. As Nunez and Rosenthal (2004) indicate in their study on the impact of private interests and ideology on bankruptcy roll calls, the fear of retaliation in the form of campaign financial cuts motivated the legislators to support bankruptcy law bills, which boosted the financial interests of businessmen. Pro-creditor voting implies the strong presence of deputies financed by private interests that benefit from it. Nevertheless, given the agnostic character of our dependent variable, ideology is not taken for granted in our article. Similarly, the existence of high rates in oil, gas and electricity production implies strong interest groups, which do not necessarily have to have the form of corporate organization. Adams (1996) underscores that deputies elected in multi-member districts tend to be much more diverse in their legislative preferences than deputies elected in single-member districts, where the factors of party discipline and dependence are much stronger than regional economic interests. Adams's observation is in line with the expectation one may have about the Russian electoral system and its consequences on the composition of the State Duma. Because 225 deputies are elected with the PR system and 225 deputies with the SMD system, it is extremely interesting to map the conflict between local interest groups and party ideology in the light of Russia's turbulent parliamentary setting. Furthermore, the political importance of committee membership is usually associated with the nature of law bills to be approved; committees involved in public works, foreign affairs, energy, or financial law bills are usually composed by members, who want to reap benefits for their constituencies and therefore increase their probability of re-election (Adler and Lapinski

1997: 913-914). In a study on the economic policy preferences of the transitional Chilean legislature, Baldez and Carey (1999) find empirical support that bargaining between deputy groups which support an increase in executive spending and groups which oppose it defines Chile's democratic transformation. They contend that this tendency is differentiated from what is usually observed in post-authoritarian societies, where the executive is successful in increasing its political and economic rents overcoming the obstacles of formal democratic procedures. Carey (2003) argues that collective action among legislators requires party discipline and prioritization of individual over collective interests. In his view, the weakening of party discipline and the responsiveness of deputies to citizens' demands is entangled with democratization of legislative organization and procedure. This is an observation that holds for the post-communist legislature of Russia; nevertheless, if deputies become business rather than party agents-as they used to be before-, it is very unlikely that this new constellation of interests is going to improve transparency and quality of democratic governance for the benefit of the people.

Covington and Bargen (2004) claim that in modern democracies majority parties are likely to control the legislative agenda and they try to make the point that the floor-median member is a factor less taken into account. This is in line with what Cox and Poole argue (2002); party discipline is a crucial predictor of voting behaviour in all but one Congress between 1877 and 1999. Nevertheless, their analyses do not make any difference between the policy areas discussed in committee and plenary sessions. In addition, logrolling mechanisms in consecutive law bill readings, both in committee and plenary sessions, may account for the impact of regional interests on the legislators' voting choices (Poole and Rosenthal 1997, Fleck and Kilby 2002). As Remington argues (2006), Russian political parties are not characterized by uniformity in discipline and ideological cohesion. Variation in discipline and ideological consistency across parties of the State Duma increases the political cost for the formation of pro-presidential coalitions, when critical law bills are considered.

Electoral mandate can affect power distribution among legislators, regional businessmen and the executive; transfer of legislators' incentives from voters to local interest groups undermines their ability to check on the political appropriateness and legitimacy of acts held by the public administration, as shown in the case of the Argentinean legislature (Jones et al. 2002). The existence of ideological bias in parliamentary sessions and interest groups represented by deputies in those sessions is not clear and there is no indisputable empirical evidence in that direction (Kollman 1997). McFaul (2001) makes an interesting point when he says that either by liquidating the presidency and promoting a two-party system or by abandoning proportional representation and therefore creating a real two-party system Russia could find a stable path in its own party development. It is understandable that this proposal is very unlikely to occur, because neither Russia's regional diversity nor its strong executive tradition can allow such a political and institutional outcome.

Our approach is consistent with that of Poole and Rosenthal (1996), when they argue that the legislators' voting behaviour cannot be interpreted with the median voter theorem; on the contrary, opportunistic party coalitions on specific roll call votes or general ideological constraints can be the most efficient patterns for explaining legislative behaviour in a multi-dimensional space. In parallel, the separation of purposes presented by Samuels and Shugart (2003) may fit in the Russian parliamentary system. Despite the strong centralization of regional and local powers toward the federal centre and the perception of energy regulation as the main determinant of Russia's foreign economic policy, we observe the creation of two different forms of accountability for the executive and the legislative branches of power. Policy switches occur, when the president intends to impose a law bill that comes in major conflict with regional interests represented in the Duma or the political career objectives of fractional leaders. The neutralization of legislative opposition and the fragmentation of the party spectre in the third term of the State Duma as argued by Smyth (2002) cannot imply any lack of political contestation in the Russian parliament; in key energy roll call votes where the

presidential administration intended to impose its own regulatory preferences in energy policy, there was a consistent opposition by both pro-presidential and anti-presidential parties, that demanded and succeeded the partial modification of the initial law bill through informal negotiations. In addition, energy law reform is directly not captured by policy-making priorities at the federal level, but it is mainly entangled with major developmental considerations at the regional level.

Talbert and Potoski (2002) are correct in finding the pre-legislative negotiations entail a much higher dimensionality than floor discussion and readings of the law bills. We treat our dependent variable as a single-dimensional axis, whose extremes are pro- and anti-reform voting behaviour. Thus, given the literature described above, we come up with the following set of hypotheses:

H1: Deputies from energy-rich constituencies are more likely to vote against energy law reform than deputies from energy-poor constituencies.

Regions with larger oil, gas and electricity production are more likely to have business leaders, who pursue intensive lobbying activities vis-à-vis the local political authorities. Given the widespread entanglement of business with formal regional leadership-both executive and legislative-, SMD deputies are less inclined to support any form of reform in the ownership status of Russia's energy industries; their political and economic rents would then be substantially reduced, because involvement of foreign investors, transfer of decision-making processes from the regions to the federal centre and promotion of transparency in regulatory practices certainly undermine the control of their regional patrons over regional energy resources.

H2: Deputies from oil-rich constituencies are more likely to promote gas market liberalization than deputies elected in gas-rich constituencies.

The profiles of the oil and gas industries in Russia are crucially different. The oil industry was fully privatized during Duma's first term, while Gazprom is up to this point a state monopoly. Thus, we contend that SMD deputies supported by oil industry interests would prefer the reduction of state ownership in the energy sector, because this could facilitate the participation of Russian and Russia-based multinationals in gas and electricity production. On the other hand, SMD deputies originating from regions where increased gas production implies a strong corporate involvement of Gazprom into regional politics are less inclined to support legislative initiatives advancing private sector development in Russian energy markets.

H3: Deputies who are members of the energy legislative committee are more likely to support energy law reform than those who are not.

Energy committee membership is entangled with the discussion, design and preliminary approval of energy law bills at the committee level. Given that the overall majority of energy law bills have been connected with the partial or full-scale opening of oil, gas and electricity markets, committee members who drafted these bills by majority voting are very likely to have been positive toward energy market reform during the time continuum between 1994 and 2003. Since there is no information on committee decision-making processes, it is not possible to run the OC method to rank committee members based on their voting choices during the various energy committee sessions.

IV. Research Design

The Model

To test whether regional conditions affect deputies voting behaviour, we propose the following baseline equation:

$$VB_i = \beta_0 + \beta_1 \cdot REG_i + \beta_2 \cdot COM_i + \beta_3 \cdot VR_i + \beta_4 \cdot PA_i + \beta_5 \cdot PS_i + \beta_6 \cdot DEM_i + \varepsilon_i \quad (1)$$

where *i* indexes the deputies in the sample. VB_i measures deputies' voting behaviour. As each Duma provides a different setting influenced by the profile of energy roll call votes, we need to clarify the interpretation the dependent variable for all three Dumas. In the First Duma, a higher value can be interpreted as a stronger pro-reformist behaviour. The same also holds for the Third Duma. On the other hand, a higher value in the Second Duma is correlated with a stronger anti-reform tendency. REG_i denotes the regional conditions of a deputy. We measure the energy significance at the regional level with two proxies. The first is the ratio of the oil, gas and electricity production in every region over the aggregate quantity of oil, gas and electricity productions in the Russian Federation. However, to the take into account the population size which is especially relevant when focusing on electricity, we also measure the regional energy production per capita as a second proxy for regional energy significance. COM_i is a dummy variable that distinguishes between those deputies who are members of Duma's energy policy committee and those who are not (Table A2 for a list of the different committees).

The regression also contains several control variables. The first set distinguishes the deputies according to their voting rule (electoral mandate)-either proportional representation or single-member district (VR_i), the second set makes the distinction according to their party affiliation (PA_i). Because the creation of ten dummy variables would be neither practical nor efficient, we divide the Russian political parties into three categories based on their official political platforms: Centre, Left and Right (see Appendix Table A1). We also create a fourth category for independent deputies who keep a non-party affiliated stance throughout the term. Party-switching is a very powerful tool in understanding general voting dynamics at the legislative level (PS_i). Energy law bills, because of their crucial political weight, have been in the epicentre of fierce inter- and intraparty contestations and therefore the cause of party

dissolutions; the floating ideological character of the Russian party system can account for these developments. The governmental efforts to dismantle Gazprom during the second term of the Russian Duma combined with the restructuring of RAO UESR, which caused a serious clash within the pro-presidential party coalition, redefined the party map of the Russian Duma. Controlling for the impact of these radical changes is certainly enlightening the regional economic dimensions of energy regulation, since it indicates the extensions of regional economic constraints in Russia's federal parliamentary politics. The demographic variables (DEM_i: age and gender) may also have policy implications on the way age and gender differences react *ceteris paribus* to pro-reform energy bills. It also helps to measure the heterogeneity of the deputies. Finally, ε_i denotes the error term.

Data Evaluation Process

This paper examines the voting behaviour of Duma members on energy roll call votes in the Russian Duma between 1994 and 2003. Our research would not have been possible without the roll call database of INDEM Foundation in Moscow (Satarov and Blagoveshenskii 2003). Roll calls covered the three first post-communist terms of the Russian Duma (1994-1995, 1996-1999 and 2000-2003). Three respective roll call matrices were created including the binary choices of each deputy. The first roll call matrix included 51, the second 196 and the third 202 votes. Following Poole's methodology (Poole 2005), we set 0.5 percent as the minimum proportion on the minority side of a roll call. Furthermore, we define 10 as the minimum number of roll calls in which a deputy has to participate in order to be included in the scaling.x The data assigns a unique number to every deputy and provides information on his party affiliation, the electoral system he was elected on and his regional origin, if he was elected on the SMD system. The Russian Constitution mentions explicitly that the State Duma must have 450 members. For each of the three terms the database contains more than 450 deputies, because some deputies were obliged by natural or legal reasons to abdicate their

parliamentary membership. The majority of them resigned to take another public office which by the 1993 Constitution is incompatible with a legislator's seat.

Our goal is to analyse the relative importance of regional factors on deputies' behaviour, controlling for other factors such as party affiliation, electoral mandates, committee membership and demographic factors. The objective of this section is to study the role of energy resources as determinants of energy regulation. The INDEM database provides information on the regional origin of SMD deputies, because regional affiliation is not deemed to be politically important for deputies elected on a PR basis. We use two proxies to evaluate the energy significance of Russian regions, namely the ratios of the oil, gas and electricity production in every region over the aggregate quantity of oil, gas and electricity productions in Russian Federation and the regional oil, gas and electricity production per capita.[xi] In parallel, the role of party labels in regional energy politics is explained in terms of political development and state organization. Given that the consistent and active participation of Communists in local elections and the differing principles between gubernatorial and regional legislative elections (Hutcheson 2003: 35-37), it might be helpful to model the multifaceted interactions between political actors and energy entrepreneurs in energy-rich and energy-poor Russian regions. Fluid boundaries between business and government and endemic phenomena of political corruption synthesize a challenging matrix of interest equilibriums and institutional players, both in federal and the regional economic policy planning.

To do this we consider an empirical approach based on the optimal classification method elaborated by Poole (1997). This method allows us to introduce a probabilistic spatial model for the analysis of roll call votes on oil, gas and electricity regulation. Given that the optimal classification model is a non-parametric method, there is no metric information on the legislators' ideal points produced (Rosenthal and Voeten 2004: 622). Poole and Rosenthal's model of Nominate Scores is the conceptual foundation for explaining the optimal classification method, since it constitutes its parametric alternative. The hypothesis that roll call voting can

be captured both by a single and a two-dimensional analysis is valid for both models of deputies (Poole 1997: 70-85). Nevertheless, Poole's non-parametric approach is less influenced by single classification errors in the legislators' ideal points. His concern is to stress the ideological underpinnings of legislative behaviour based on a metrically unbiased method that does not consider the strategic calculus of party coalitions to be in the core of parliamentary politics. The roll call votes focus exclusively on oil, gas and electricity regulation. The optimal classification method has the objective of locating ideal points for legislators and separating hyper planes for roll calls such that the number of classification errors is minimized. A classification error for a legislator on a roll call occurs when the legislator's ideal point is such that his or her vote is not in line with the separating hyper plane for the roll call. In addition, the optimal classification method counts equally all classification errors (Rosenthal and Voeten 2004: 622). Its single-dimensional ranking is divided into four distinct orders (from 1 to 4) and is regressed on of several control variables.

In addition, because the inclusion of our aggregated regional variables will produce downwardly biased standard errors, we address the problem of heteroskedasticity by presenting standard errors adjusted for clustering on Russian regions (see Figures A1 and A2, and Table A2 and A3). The advantage of this class of estimators is that they do not require a precise modelling of the heteroskedasticity source. Therefore, they are robust to heteroskedasticity of arbitrary form. In general, cluster estimators tend to increase the reported standard errors by a relatively large amount, which reduces the levels of statistical significance for the estimated coefficients without affecting the marginal effects and the size of the coefficients.

The calculation of marginal effects is pivotal for the success of our analysis. Ordered probit models analyse the ranking information of the scaled dependent variable. The equation of a (ordered) probit estimation has a non-linear form; only the sign of the coefficient can be

directly interpreted and not its size. Calculating the marginal effects is therefore a method to find the quantitative effect a variable has on the dependent variable.

It is interesting that there is no Duma representative for the republic of Chechnya; this is why we count one state less than the official number of the Russian federal subjects. On the contrary, there are deputies representing all seven Russian administrative districts. We have to stress here that PR deputies have been coded as 0 in the regional factor variables; as their election is dependent on the party's percentage on an all-Russian electoral basis, it is not methodologically consistent to assume their connection with energy interest groups in certain regions with higher or lower rates of oil, gas or electricity production. In a second step we are only going to work with the sub-sample of members elected from SMDs. Focusing only on SMDs allows checking the robustness of the previous results. Moreover, to better evaluate the importance of energy resources we will conduct for every estimation a Wald-test for coefficient restrictions testing for joint significance to be able to conclude whether energy resources as a group play a significant role in the determination of Poole's ranking.

V. Empirical Results

We present the empirical results focusing independently on the First Duma (Table 1 and 2), Second Duma (Table 3 and 4) and Third Duma (Table 5 and 6) working with the whole sample (Table 1, 3, 5) and the SMD's sub-sample (Table 2, 4, 6). In every table we report estimations with standard errors adjusted for clustering on Russian regions[xii] and estimations with the two different proxies of regional energy relevance. We also present specifications without the electricity variable due to low values when working with the per capita values.

a) First Duma

The significant role of energy resources is supported in the first two tables when looking at the chi2-statistics showing that the null hypothesis is rejected in most of the cases at the

1% significance levels, which means that energy resources have a significant effect on deputies' behaviour in the First Duma. The marginal effects are also quite substantial. This result supports our first hypothesis. The changing signs of oil and gas factors in Table 1 (where regional production is measured as percentage of the regional production for both SMD and PR deputies), combined with their strong statistical significance also confirms our second hypothesis. Nevertheless, the statistical insignificance of the oil factor in Table 2 and the last estimations in Table 1 (when we proxy regional energy resources as regional production per capita and in Table 2), together with the robust statistical significance of the natural gas factor in both tables leads to the following conclusion; Chernomyrdin's solid Gazprom leadership and subsequent Prime Ministership of Russian Federation (1992-1998) provided the company's privatization process with a major institutional backup and strong selection bias as indicated in the organization of closed auctions so that the participation of only specific bidders is ensured. Chernomyrdin's heavy influence on Gazprom's corporate governance procedures, particular through his ties with Rem Viakhirev, the newly appointed Gazprom's Chairman, can explain why the pro-gas governmental coalition in the first Duma term has a consistent voting behaviour and confirms the Prime Minister's strategic decision to partially privatize Gazprom, while keeping the state as the main corporate shareholder. There is no doubt that Chernomyrdin can be classified as the leading energy politics figure of the first Duma term; the continuous statistical significance of the gas factor quantifies this observation.

The high statistical significance of the *Committee* variable combined with the high marginal effects indicates that members of the energy parliamentary committee of the First Duma are more likely to vote pro-reform bills as opposed to the others. Thus, hypothesis 3 cannot be rejected. The appointment of the energy committee members should certainly not be deemed to be incidental and the outcome of oil industry privatization in early 1990s is the clearest indication for that.

b) Second Duma

The results in Table 3 and 4 underscore that the origin from an energy-rich or energy-poor Russian region did play an important role in the voting choices of deputies, but only with respect to the oil and gas sectors; the coefficients of oil and gas production are statistically significant only when we proxy energy production as regional per capita production; this finding is also supported by the Wald-test. Hypothesis 1 cannot be rejected in these specifications. A potential interpretation of this result is linked with the evolution of Gazprom-Government relations in the aftermath of Chernomyrdin's firing from Prime Ministership in 1998, amidst Duma's second term. Gazprom lost its governmental support, and it was suddenly obliged to pay huge amounts of taxes to avoid the confiscation of its property. It is obvious that the regional per capita production proxy captures the peripheral dimension of energy resources in a more solid way, both at the aggregate and the SMD sub-sample level; thus, it helps in the direct quantification of the linkage between regional energy security and re-election incentives held by SMD deputies. The strong statistical significance of the gas production factor accounts for the strong and positive legislative support to Gazprom's consolidated state character, contrary to governmental proposals, instigated by the IMF and the World Bank Group. The occurrence of intense legislative debates with major initiatives from both sides led to a final compromise; Gazprom finally paid its tax debts, but it also stayed under state control. The equally strong anti-reform tendency in the oil production factor reflects the legislative majority's rejection of Rosneft and Slavneft privatization proposals as an outcome of the previous oil privatization experience in the early 1990s.

The Committee membership determinant is only statistically significant when we focus on the SMD sub-sample. However, it has a negative sign, which is consistent with the first Duma, when we taking into account the different interpretation of the dependent variable. It is likely that the composition of the energy committee confirms our contention that members of the energy legislative committee are more likely to support oil and gas market reform bills

than non-members; however, energy market reform should not be considered to be identical with energy market liberalization in this particular legislative setting. During its second term, the Duma aimed at restoring Gazprom's financial accountability and in parallel maintaining the majority of its shares under state control. This double goal is captured by the committee membership variable as well and is aligned with the last of our initial research hypotheses.

c) Third Duma

The political contestation over electricity reform in the Third Duma and the divided stance of Russian centrist parties can substantially explain the high statistical significance of the gas production variable. Surprisingly enough, the electricity production variable is statistically insignificant no matter what regional resources proxy or deputies sample we use. The divide of the pro-governmental coalition over the RAO UESR reform and the role of Anatolii Chubais are certainly reflected in the statistical output, as the electricity production factor for the voting decisions of SMD deputies remains statistically insignificant. The support of the RAO UESR reform by SMD deputies originating from gas-rich regions makes perfect sense, since UESR liberalization and the subsequent increase of electricity prices would optimize the profits of regional businessmen with a strong commercial presence in the gas industry. Therefore, in line with First Duma, the gas factor seems to significantly affect deputies voting behaviour located in the pro-reform component of the single dimensional axis. Moreover, in line with previous findings we observe a support of our first hypothesis when focusing on the per capita energy proxies.

The Committee factor is statistically significant at the 5 percent level, but only in the SMD sub-sample; in any case, it is still less strong than in the First Duma. A possible explanation for that may be again Luzhkov's opposition to Anatolii Chubais's restructuring plan of RAO UESR and subsequently to President Putin. Nevertheless, the majority of SMD

deputies, who were energy committee members, supported the RAO UESR reform, both in the committee discussions and in the plenary sessions. Moreover, here can be no major conclusion for the energy committee factor at the aggregate level. Lesser representation in membership or inconsistent voting attitudes may well account for the variable statistical significance of this determinant between the aggregate and SMD sub-sample levels.

d) Control Variables

Taking a look at the ideology and coherence as attributes of energy market reforms, we can conclude that the results in the First Duma indicate that there are statistically significant differences between Leftist and Rightist deputies. Left oriented deputies seemed to have stronger anti-reform policy preferences than the right oriented ones. As a consequence, it may be concluded that right deputies in 1994 and 1995 are more likely to support the presidential agenda and vote for rather than against regulatory and ownership reform in the energy sector. The single dimensional axis in the first Duma has the following ideological sequence: **Right > Independent > Center > Left.** The Second Duma shows an inversed direction of the ideological factor signs, which are all statistically significant at the 1 percent level: **Left > Right > Independent > Center**. Interestingly enough, the Party Change variable is now highly statistical significant independently of the energy production proxy and the sample we use. The ideology coefficients in the Third Duma are also statistically significant at the 1 percent level and have the following ranking: **Right > Independent > Center > Left**. This impressive ordering of ideology factors throughout the three Duma terms does not reverse the argument that in Russia there is no single-dimensional Right-Left axis.

It seems that in the First Duma SMD deputies are more likely to maintain a higher position in Poole's single dimensional ranking, because the SMD coefficient is statistically significant; during the first years of the transition they advocate oil and gas market reform to increase their political and economic rents both at the federal and the regional level. In the Second Duma SMD deputies are more likely than PR deputies to vote for bills introducing

energy market reform, which means in the specific legislative context that they support the social and state character of Gazprom and block its disintegration plans supported by the Ministry of Economic Development and Trade. This last effort caused the reaction of a strong interparty SMD alliance, which saw a potential vertical increase in domestic gas prices as a direct threat posed against their re-election probability. On the other hand, the negative coefficient of the SMD factor in the Third Duma indicates an anti-reform direction. SMD deputies are less inclined to advocate the restructuring of RAO UESR than PR deputies, because the proposed reform lessens the power of Regional Energy Commissions and, therefore, their political impact on electricity pricing.

Taking a look at the socio-demographic factors we can conclude that gender differences are observable, particularly in the First and the Third Duma. In both terms, women seemed to have a more pro-reformist legislative behaviour than men. The elderly Russian elites are inclined to support the executive's legislative initiatives for changing the ownership structure of Gazprom in the First Duma term, although the sign is inversed at the 10 percent significance level, when we use the SMD sub-sample. Contrary to the First Duma, in the Second Duma we clearly observe a linear relationship between age and anti-reform legislative choices. This is also the case for the Third Duma.

e) Case Studies

In this last part of our empirical analysis we intend to check the validity of our aggregate estimations by running a similar estimation structure as previously using probit models for individual roll votes. This method enables us not only to understand the underpinnings of our previous results at the micro-legislative level, but also to test whether the individual estimations for crucial roll votes in each of the three first terms of Russia's democratic transition confirm or contradict the broader findings located in previous parts of the article. What we do is to analyze the two most crucial roll call votes during these ten

years: roll call vote No. 46300[xiii] on the ownership status of Gazprom and roll call vote No. 129940 on the restructuring of RAO UESR. Table 7 and 8 present the results of both roll call votes. For simplicity, we only report the results of the energy variables. However, we control for all other factors in the regressions.

The results of the roll call vote No. 46300 indicate that deputies coming from oil-rich regions are less inclined to support Gazprom as opposed to deputies coming from gas-rich regions. It seems that regional policies are certainly crucial at the individual level, which is less the case at the aggregate level. The break-up of Gazprom and the opening of the Russian gas market to foreign investors provoked a tremendous conflict of interests among deputies from fractions and regions with often contradictory interests. The State Duma's successful support of Gazprom's state character is an ample indicator that, despite the presidential initiative and vested regional interests, the collective legislative choice of the deputies was aligned with a firm notion of statehood, which is apparent throughout Russian economic history.

Moreover, in the results of roll call No. 129940 it is not a surprise to observe that deputies coming from electricity-rich regions would be very likely to support this law bill, since it was the outcome of long debates and hard negotiations, both formal and informal; in any case, the policy impact of the RAO UESR reform was going to affect analogously the regulatory power of their local energy commission. Although not reported, it is also worthwhile to note that we were not able observe that committee membership matters. Thus, it is evident that the composition of the committee that prepared both law bills was biased.

VI. Conclusions

Our goal was to analyse the relative importance of energy factors on the legislative behaviour of Russian deputies, controlling for other factors such as ideology and party affiliation, electoral mandate, committee membership and socio-demographic factors. We

have therefore intensively investigated empirically the role of energy resources as determinants of energy regulation using a new data set that has not been explored so far in the literature covering none less than three Dumas covering also a rich set of control variables. This allows investigating the impact of regional conditions in a dynamic environment. Moreover, we provide a novel approach based on a rich set of roll calls.

We observe that energy resource factors did affect deputies voting choices. On the other hand, we also find that regional economic preferences are constrained by the public policy priorities of the federal centre that continue to set the tone in energy market reform in post-Soviet Russia. At that point, the question whether State Duma can act as a real representative of people's interests becomes profound. The critical significance of the gas production factor, measured both from a federal and regional standpoint, in all three Dumas reveals the strong institutional connection – both formal and informal - between Gazprom and SMD deputies from gas-rich regions. This is an extremely interesting conclusion, since it provides an added regional dimension to the already known Gazprom's political ties at the level of federal politics. Our first hypothesis does not generally hold in the light of the empirical evidence provided in this article; in all Dumas SMD deputies from energy-rich regions were more inclined to support by majority legislative proposals on energy market reform. The variable significance of the oil production factor between 1994 and 2003 does allow a solid conclusion on the antithetic nature of oil and gas industry interests at the regional level. Nevertheless, the energy committee membership is indeed a predictive factor for the positive stance of a deputy vis-à-vis an energy market law bill.

With respect to the control variables, we conclude that there is no Left-Right ideological axis in the political economy of Russia's energy market reform. Second, the pro-and anti-reform poles observed in the single dimensional scale we used in all three Dumas are not necessarily connected with liberal and state-oriented conservative policies respectively. This may be the case for the First and the Third Duma, but it is not the case for the Second Duma.

The disentanglement of reform from the standard free market approach is an interesting aspect partially provided by this article. In general, deputies are likely to establish bonds of interdependence with regional monopolists and other entrepreneurs, given that the latter can financially support their electoral campaigns. Nevertheless, the strong statistical significance of ideology factors in all three Dumas combined with the absence of consistent Left-Right axis shows that Russian political parties grouped across the traditional ideological lines may not be credible in terms of ideological honesty; however, they are indeed credible and predictable as interest groups pursuing a specific policy set, which maximizes the welfare of their members. If personal interests are more important than parties, it is worthwhile to figure out what the role of the former in the evolutionary course of party institutions.

The argument that Russia under Yeltsin and Putin administrations has evolved to an electoral monarchy {Shevtsova 2000} does not hold in the light of the quantitative analysis presented above. The State Duma may be regarded as an institution with a two-fold orientation: it is both a state organ and, in parallel, a political actor maintaining strong institutional ties with energy business. Corporate developments in the Russian oil sector combined with the ongoing reform planning for Gazprom and RAO UESR necessitated interparty and interregional coalitions, if not for the promotion of a common energy agenda, at least for the prevention of reform projects, which would be unfavourable to regional energy monopolies and cause popular disapprobation. Collective strategies cover a larger set of objectives and have an increased probability of success.

Another problem is that defining the notion of workable competition in Russian energy markets has not been an easy case. In the Russian context the establishment of competitive market structures is not connected only with the issue of potential market entry as opposed to narrower standards used in the past to classify market concentration (Ellig and Kalt 1996: 117-118). It refers to concrete private players whose market entry is the outcome of a privileged relationship with state officials. It is correct that no regulatory regime can remove

all inefficiencies: however, its performance can be improved uniquely, if corporate and public actors are given incentives to reduce public and private costs in the energy industry and thus boost people's welfare. Thus, the Russian Duma acts as a de facto regulator by contributing to the implementation of a transparent tariff-setting system and the promotion of energy reform under conditions of democratic representation and political competition.

References

Adams, G. D. "Legislative Effects of Single-Member vs. Multi-Member Districts." *American Journal of Political Science* 40, no. 1 (1996): 129-44.

Adler, E. S., and J. S. Lapinski. "Demand-Side Theory and Congressional Committee Composition: A Constituency Characteristics Approach." *American Journal of Political Science* 41, no. 3 (1997): 895-918.

Baldez L. and J. M. Carey. "Presidential Agenda Control and Spending Policy: Lessons from General Pinochet's Constitution." *American Journal of Political Science* 43, no. 1 (1999): 29-55.

Butyrkin, A. "Problems of Reform in Natural Monopolies." (In Russian). *World Economics and International Relations* 2003, No. 12 (2003): 3-11.

Carey J. M. "Transparency Versus Collective Action - Fujimori's Legacy and the Peruvian Congress." *Comparative Political Studies* 36, no. 9 (2003): 983-1006.

Constitution of the Russian Federation: with commentaries and interpretation by American and Russian scholars; edited by Vladimir V. Belyakov and Walter J. Raymond Imprint Lawrenceville, Va. : Brunswick Pub. Co.; Moscow, Russian Federation: Russia's Information Agency-Novosti, 1994 Edition 1st ed., Special presidential ed.

Covington C. R. and A. A. Bargen. "Comparing Floor-Dominated and Party-Dominated Explanations of Policy Change in the House of Representatives." *Journal of Politics* 66, no. 4 (2004): 1069-88.

Cox G. W. and K. T. Poole. "On Measuring Partisanship in Roll-Call Voting: The US House of Representatives, 1877-1999." *American Journal of Political Science* 46, no. 3 (2002): 477-89.

Doering, H. and M. Hallerberg. *Patterns of Parliamentary Behaviour: Passage of Legislation across Western Europe*. Aldershot: Ashgate, 2004.

Ellig, J. and J. P. Kalt. *New Horizons in Natural Gas Deregulation*, *Quorum Books*. Westport CT: Praeger, 1996.

Federal Service of Statistics. CD-ROM. *Russian Regions*. (In Russian). Moscow, 2004.

Fleck R. K., and C. Kilby. "Reassessing the Role of Constituency in Congressional Voting." *Public Choice* 112, No. 1 (2002): 31-53.

Hutcheson, D. S. *Political Parties in the Russian Regions*, *Basees/RoutledgeCurzon Series on Russian and East European Studies ; 2*. New York: RoutledgeCurzon, 2003.

Jones, M. P., S. Saiegh, P. T. Spiller, and M. Tommasi. "Amateur Legislators-Professional Politicians: The Consequences of Party-Cantered Electoral Rules in a Federal System." *American Journal of Political Science* 46, no. 3 (2002): 656-69.

Kollman, K. "Inviting Friends to Lobby: Interest Groups, Ideological Bias, and Congressional Committees." *American Journal of Political Science* 41, no. 2 (1997): 519-44.

Mau, V. *Law and Economics: Constitutional Problems of Economic Reform in Russia*. (In Russian). 9R ed. Moscow: Institute of Transitional Economies, 1998.

McFaul, M. "Explaining Party Formation and Nonformation in Russia - Actors, Institutions, and Chance." *Comparative Political Studies* 34, No. 10 (2001): 1159-87.

Moser, R. G. and B. Zoltan ed. *Russian Politics: Challenges of Democratization*. Cambridge: Cambridge University Press, 2001.

Nunez S. and H. Rosenthal. "Bankruptcy "Reform" in Congress: Creditors, Committees, Ideology, and Floor Voting in the Legislative Process." *Journal of Law Economics & Organization* 20, No. 2 (2004): 527-57.

Nureev, R. M. *Economic Subjects of Post-Soviet Russia (Institutional Analysis)*. 3 vols. Vol. 2, *Scholarly Reports: Independent Economic Analysis*. (In Russian). Moscow: Moscow Foundation of Social Sciences, 2003.

Poole K. T and Howard Rosenthal. "Are Legislators Ideologues or the Agents of Constituents?" *European Economic Review* 40 (1996): 707-17.

Poole, K. T. and H. Rosenthal. *Congress : A Political-Economic History of Roll Call Voting*. New York: Oxford University Press, 1997.

Poole, K. T. *Spatial Models of Parliamentary Voting*. Cambridge: Cambridge University Press, 2005.

Remington Thomas F. “Presidential Support in the Russian State Duma”. *Legislative Studies Quarterly* XXXI: 1, February 2006.

Rosenthal, H. and E. Voeten. "Analysing Roll Calls with Perfect Spatial Voting: France 1946-1958." *American Journal of Political Science* 48, No. 3 (2004): 620-32.

Samuels D. J. and M. S. Shugart. "Presidentialism, Elections and Representation." *Journal of Theoretical Politics* 15, No. 1 (2003): 33-60.

Satarov, G. and N. Blagoveshenskii, INDEM Statistics Project: A Database of Russian Roll Call Votes (In Russian). INDEM Foundation. 2003.

Shakhmalov, F. *Foundations of State Organization Theory*. (In Russian). Moscow: Ekonomika, 2003.

Shevtsova, L. "From Yeltsin's Russia to Putin's Russia." (In Russian). *Contemporary Europe*. No. 4 (2000): 20-32 p.

Smith, S. S. and T. F. Remington. *The Politics of Institutional Choice: The Formation of the Russian State Duma*. Princeton, N.J.: Princeton University Press, 2001.

Smyth R. "Building State Capacity from the inside Out: Parties of Power and the Success of the President's Reform Agenda in Russia." *Politics & Society* 30, No. 4 (2002): 555-78.

Talbert J. C. and M. Potoski. "Setting the Legislative Agenda: The Dimensional Structure of Bill Cosponsoring and Floor Voting." *Journal of Politics* 64, No. 3 (2002): 864-91.

Tsapelik, V. "Reform and Regulation of Natural Monopolies." (In Russian). Moscow: Institute of Transitional Economies, 2000: 1-60 p.

Table 1

Determinants of Energy Reform in the First Duma

Dependent Var.: Single Dimensional Ranking with the Optimal Classification Method, Clustering on Russian Regions																		
Factors	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)
Regional production as percentage of national production																		
Oil	5.446***	3.75	-1.688	-0.483	0.589	1.583												
Gas	-3.570***	-3.88	1.107	0.317	-0.386	-1.038												
Electricity	-0.842	-0.24	0.261	0.075	-0.091	-0.245												
Regional production per capita																		
Oil							3.472	0.61	-1.076	-0.308	0.373	1.011	6.584	1.55	-2.042	-0.583	0.707	1.919
Gas							2.532***	3.81	-0.785	-0.225	0.272	0.738	2.410***	3.69	-0.747	-0.214	0.259	0.702
Electricity							13702	0.76	-4248	-1217	1473	3991						
Committee	0.468***	3.46	-0.123	-0.059	0.027	0.156	0.507***	3.61	-0.131	-0.065	0.026	0.170	0.512***	3.63	-0.132	-0.066	0.026	0.172
SMD	0.382***	4.32	-0.118	-0.034	0.040	0.111	0.265**	2.32	-0.082	-0.023	0.028	0.077	0.336***	3.57	-0.104	-0.030	0.035	0.098
Centre	-0.711***	-3.93	0.216	0.061	-0.071	-0.207	-0.732***	-4.16	0.223	0.063	-0.072	-0.214	-0.741***	-4.06	0.225	0.064	-0.073	-0.216
Independent	-0.512*	-1.66	0.181	0.014	-0.075	-0.120	-0.477	-1.53	0.167	0.015	-0.069	-0.114	-0.500	-1.61	0.177	0.014	-0.073	-0.118
Right	0.197*	1.85	-0.059	-0.020	0.019	0.060	0.173	1.59	-0.052	-0.017	0.017	0.052	0.170	1.51	-0.051	-0.017	0.016	0.051
Woman	0.463***	3.68	-0.125	-0.056	0.030	0.151	0.500***	3.71	-0.133	-0.062	0.030	0.165	0.493***	3.86	-0.132	-0.061	0.030	0.162
Age	0.009*	1.78	-0.003	-0.001	0.001	0.002	0.008*	1.67	-0.003	-0.001	0.001	0.002	0.008*	1.68	-0.003	-0.001	0.001	0.002
Party Change	0.159	1.31	-0.048	-0.015	0.016	0.047	0.220	1.46	-0.066	-0.022	0.021	0.067	0.211	1.44	-0.063	-0.021	0.020	0.064
chi2-stat energy resources	23.30***						199.06***						153.13***					
Number of obs	400						400						400					
Prob>chi2	0.000						0.000						0.000					
Pseudo R2	0.051						0.048						0.048					

Notes: Robust standard errors. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Zero party switches for Independent. Reference groups: PR; Left, Man, Not changed the party, Not a member of Duma's energy policy committee. According to the Optimal Classification output, the algorithm converges to 0.03959 (4%) in error proportion, to 0.96041 (96%) in correct classification, to 0.66202 (66.2%) in APRE, and the Spearman correlation between the current legislator estimates and the previous iteration estimates converges to 0.99989.

Table 2

Determinants of Energy Reform in the First Duma (sub-sample of members elected from SMDs)

Dependent Var.: Single Dimensional Ranking with the Optimal Classification Method, Clustering on Russian Regions																		
Factors	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)
Regional production as percentage of national production																		
Oil	-1.838	-1.57	0.381	0.090	-0.386	-0.085												
Gas	1.245**	2.20	-0.258	-0.061	0.262	0.057												
Electricity	4.012	0.65	-0.831	-0.197	0.843	0.185												
Regional production per capita																		
Oil							-1.228	-0.32	0.254	0.062	-0.259	-0.057	-3.290	-1.23	0.681	0.166	-0.694	-0.153
Gas							1.213***	3.43	-0.251	-0.061	0.256	0.056	1.394***	5.62	-0.289	-0.070	0.294	0.065
Electricity							-8971	-0.76	1854	451	-1892	-414						
Committee	0.836**	2.46	-0.115	-0.158	0.195	0.078	0.808**	2.23	-0.112	-0.151	0.189	0.074	0.806**	2.24	-0.112	-0.151	0.189	0.074
Centre	2.628***	7.17	-0.702	0.226	0.359	0.118	2.663***	7.25	-0.710	0.227	0.362	0.120	2.649***	7.20	-0.707	0.226	0.361	0.120
Independent	2.247***	4.51	-0.134	-0.600	0.199	0.535	2.336***	4.14	-0.134	-0.615	0.179	0.569	2.300***	4.10	-0.134	-0.609	0.186	0.557
Right	3.091***	6.84	-0.150	-0.682	0.028	0.804	3.125***	6.94	-0.149	-0.684	0.021	0.812	3.099***	6.85	-0.149	-0.682	0.025	0.806
Woman	0.546*	1.81	-0.086	-0.082	0.127	0.041	0.504	1.64	-0.081	-0.073	0.117	0.036	0.515*	1.70	-0.082	-0.076	0.120	0.038
Age	-0.017	-1.60	0.004	0.001	-0.004	-0.001	-0.018*	-1.73	0.004	0.001	-0.004	-0.001	-0.018*	-1.73	0.004	0.001	-0.004	-0.001
Party Change	0.465*	1.90	-0.080	-0.057	0.106	0.030	0.428*	1.75	-0.074	-0.050	0.098	0.027	0.429*	1.75	-0.075	-0.051	0.098	0.027
chi2-stat energy resources	4.89						36.52***						35.56***					
Number of obs	233						233						233					
Prob>chi2	0.000						0.000						0.000					
Pseudo R2	0.325						0.325						0.325					

Notes: Robust standard errors. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Zero party switches for Independent. Reference groups: Left, Man, Not changed the party, Not a member of Duma's energy policy committee. According to the Optimal Classification output, the algorithm converges to 0.03959 (4%) in error proportion, to 0.96041 (96%) in correct classification, to 0.66202 (66.2%) in APRE, and the Spearman correlation between the current legislator estimates and the previous iteration estimates converges to 0.99989.

Table 3

Determinants of Energy Reform in the Second Duma

Dependent Var.: Single Dimensional Ranking with the Optimal Classification Method, Clustering on Russian Regions																		
Factors	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)
Regional production as percentage of national production																		
Oil	0.560	0.73	-0.113	-0.111	0.124	0.099												
Gas	0.248	0.45	-0.050	-0.049	0.055	0.044												
Electricity	4.180	0.92	-0.841	-0.827	0.927	0.741												
Regional production per capita																		
Oil							8.262**	2.58	-1.666	-1.630	1.833	1.463	7.359***	3.75	-1.484	-1.452	1.633	1.303
Gas							-1.779***	-2.62	0.359	0.351	-0.395	-0.315	-1.740**	-2.57	0.351	0.343	-0.386	-0.308
Electricity							-4379	-0.35	883	864	-972	-775						
Committee	-0.202	-0.60	0.045	0.035	-0.048	-0.032	-0.184	-0.54	0.041	0.032	-0.044	-0.029	-0.187	-0.55	0.041	0.033	-0.045	-0.030
SMD	-0.269**	-2.03	0.054	0.053	-0.059	-0.048	-0.174	-1.48	0.035	0.034	-0.038	-0.031	-0.194**	-2.02	0.039	0.038	-0.043	-0.035
Centre	-2.467***	-5.84	0.596	0.176	-0.378	-0.395	-2.459***	-5.85	0.595	0.176	-0.378	-0.393	-2.459***	-5.84	0.595	0.176	-0.378	-0.393
Independent	-2.683***	-4.73	0.820	-0.275	-0.421	-0.123	-2.595***	-4.59	0.805	-0.264	-0.419	-0.122	-2.597***	-4.60	0.806	-0.265	-0.419	-0.122
Right	-1.233***	-4.37	0.380	0.036	-0.301	-0.115	-1.230***	-4.40	0.379	0.036	-0.300	-0.115	-1.229***	-4.39	0.378	0.037	-0.300	-0.115
Woman	0.067	0.48	-0.013	-0.014	0.014	0.012	0.060	0.43	-0.012	-0.012	0.013	0.011	0.060	0.43	-0.012	-0.012	0.013	0.011
Age	0.012*	1.94	-0.002	-0.002	0.003	0.002	0.012**	1.97	-0.002	-0.002	0.003	0.002	0.012**	1.98	-0.002	-0.002	0.003	0.002
Party Change	0.731***	6.41	-0.113	-0.165	0.110	0.168	0.746***	6.34	-0.115	-0.168	0.111	0.172	0.746***	6.33	-0.115	-0.168	0.112	0.172
chi2-stat energy resources	4.30						24.57***						23.77***					
Number of obs	464						464						464					
Prob>chi2	0.000						0.000						0.000					
Pseudo R2	0.280						0.280						0.280					

Notes: Robust standard errors. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Reference groups: PR; Left, Man, Not changed the party, Not a member of Duma's energy policy committee. According to the Optimal Classification output, the algorithm converges to 0.04288 (4.3%) in error proportion, to 0.95712 (95.7%) in correct classification, to 0.53441 (53.44%) in APRE, and the Spearman correlation between the current legislator estimates and the previous iteration estimates converges to 0.99828.

Table 4

Determinants of Energy Reform in the Second Duma (sub-sample of members elected from SMDs)

Dependent Var.: Single Dimensional Ranking with the Optimal Classification Method, Clustering on Russian Regions																		
Factors	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)
Regional production as percentage of national production																		
Oil	0.355	0.52	-0.089	-0.051	0.080	0.060												
Gas	0.076	0.17	-0.019	-0.011	0.017	0.013												
Electricity	2.433	0.53	-0.608	-0.352	0.548	0.412												
Regional production per capita																		
Oil							5.287*	1.75	-1.326	-0.759	1.195	0.890	4.740***	3.46	-1.189	-0.681	1.071	0.798
Gas							-1.870***	-3.25	0.469	0.269	-0.423	-0.315	-1.856***	-3.23	0.466	0.267	-0.419	-0.313
Electricity							-2652	-0.20	665	381	-599	-447						
Committee	-0.745**	-2.16	0.239	0.021	-0.180	-0.081	-0.725**	-2.04	0.232	0.022	-0.176	-0.079	-0.729**	-2.03	0.234	0.022	-0.176	-0.079
Centre	-1.870***	-8.01	0.495	0.140	-0.330	-0.305	-1.867***	-8.01	0.495	0.138	-0.330	-0.303	-1.866***	-8.06	0.495	0.138	-0.330	-0.303
Independent	-2.365***	-4.64	0.763	-0.253	-0.377	-0.133	-2.297***	-4.43	0.749	-0.244	-0.374	-0.131	-2.298***	-4.44	0.749	-0.245	-0.374	-0.131
Right	-1.006***	-3.62	0.348	-0.029	-0.232	-0.086	-1.029***	-3.70	0.357	-0.034	-0.237	-0.086	-1.022***	-3.73	0.354	-0.033	-0.235	-0.086
Woman	0.020	0.12	-0.005	-0.003	0.004	0.003	0.015	0.09	-0.004	-0.002	0.003	0.003	0.015	0.09	-0.004	-0.002	0.003	0.003
Age	0.016	1.60	-0.004	-0.002	0.004	0.003	0.016	1.59	-0.004	-0.002	0.004	0.003	0.016	1.60	-0.004	-0.002	0.004	0.003
Party Change	0.754***	4.07	-0.151	-0.142	0.128	0.166	0.773***	4.08	-0.155	-0.145	0.130	0.170	0.772***	4.07	-0.155	-0.145	0.130	0.170
chi2-stat energy resources	2.34						25.26***						25.64***					
Number of obs	238						238						238					
Prob>chi2	0.000						0.000						0.000					
Pseudo R2	0.225						0.225						0.225					

Notes: Robust standard errors. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Reference groups: Left, Man, Not changed the party, Not a member of Duma's energy policy committee. According to the Optimal Classification output, the algorithm converges to 0.04288 (4.3%) in error proportion, to 0.95712 (95.7%) in correct classification, to 0.53441 (53.44%) in APRE, and the Spearman correlation between the current legislator estimates and the previous iteration estimates converges to 0.99828.

Table 5

Determinants of Energy Reform in the Third Duma

Dependent Var.: Single Dimensional Ranking with the Optimal Classification Method, Clustering on Russian Regions																		
Factors	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)
Regional production as percentage of national production																		
Oil	-1.427	-1.34	0.264	0.229	-0.341	-0.152												
Gas	0.923*	1.81	-0.171	-0.148	0.220	0.098												
Electricity	-0.663	-0.12	0.123	0.106	-0.158	-0.071												
Regional production per capita																		
Oil							-0.346	-0.09	0.064	0.056	-0.083	-0.037	-3.421	-1.28	0.634	0.547	-0.817	-0.364
Gas							0.941***	2.82	-0.174	-0.151	0.225	0.100	1.213***	5.65	-0.225	-0.194	0.290	0.129
Electricity							-13395	-1.18	2473	2148	-3202	-1420						
Committee	0.395	1.64	-0.059	-0.087	0.092	0.055	0.376	1.53	-0.057	-0.082	0.088	0.051	0.372	1.52	-0.056	-0.081	0.087	0.051
SMD	-0.795***	-4.84	0.149	0.120	-0.181	-0.088	-0.744***	-4.85	0.139	0.114	-0.171	-0.082	-0.821***	-6.76	0.154	0.124	-0.187	-0.091
Centre	3.323***	8.43	-0.760	-0.029	0.393	0.396	3.324***	8.45	-0.760	-0.029	0.394	0.395	3.311***	8.34	-0.758	-0.029	0.393	0.394
Independent	2.819***	5.55	-0.112	-0.589	-0.128	0.829	2.872***	5.54	-0.112	-0.591	-0.136	0.839	2.824***	5.39	-0.112	-0.589	-0.129	0.830
Right	3.170***	11.47	-0.188	-0.615	-0.057	0.859	3.174***	11.60	-0.188	-0.615	-0.057	0.860	3.160***	11.33	-0.188	-0.614	-0.056	0.857
Woman	0.360	1.47	-0.055	-0.078	0.084	0.049	0.343	1.42	-0.052	-0.074	0.080	0.046	0.354	1.48	-0.054	-0.077	0.083	0.048
Age	-0.014***	-3.06	0.003	0.002	-0.003	-0.001	-0.014***	-3.14	0.003	0.002	-0.003	-0.001	-0.014***	-3.15	0.003	0.002	-0.003	-0.001
Party Change	0.259***	2.09	-0.043	-0.051	0.061	0.032	0.264**	2.13	-0.043	-0.052	0.063	0.033	0.263**	2.12	-0.043	-0.052	0.062	0.033
chi2-stat energy resources	3.93						49.96***						45.52***					
Number of obs	466						466						466					
Prob>chi2	0.000						0.000						0.000					
Pseudo R2	0.360						0.361						0.360					

Notes: Robust standard errors. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Reference groups: PR; Left, Man, Not changed the party, Not a member of Duma's energy policy committee. According to the Optimal Classification output, the algorithm converges to 0.02905 (3%) in error proportion, to 0.97095 (97%) in correct classification, to 0.87064 (66.2%) in APRE, and the Spearman correlation between the current legislator estimates and the previous iteration estimates converges to 0.99987.

Table 6

Determinants of Energy Reform in the Third Duma (sub-sample of members elected from SMDs)

Dependent Var.: Single Dimensional Ranking with the Optimal Classification Method, Clustering on Russian Regions																		
Factors	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)
Regional production as percentage of national production																		
Oil	-1.838	-1.57	0.381	0.090	-0.386	-0.085												
Gas	1.245**	2.20	-0.258	-0.061	0.262	0.057												
Electricity	4.012	0.65	-0.831	-0.197	0.843	0.185												
Regional production per capita																		
Oil							-1.228	-0.32	0.254	0.062	-0.259	-0.057	-3.290	-1.23	0.681	0.166	-0.694	-0.153
Gas							1.213***	3.43	-0.251	-0.061	0.256	0.056	1.394***	5.62	-0.289	-0.070	0.294	0.065
Electricity							-8971	-0.76	1854	451	-1892	-414						
Committee	0.836**	2.46	-0.115	-0.158	0.195	0.078	0.808**	2.23	-0.112	-0.151	0.189	0.074	0.806**	2.24	-0.112	-0.151	0.189	0.074
Centre	2.628***	7.17	-0.702	0.226	0.359	0.118	2.663***	7.25	-0.710	0.227	0.362	0.120	2.649***	7.20	-0.707	0.226	0.361	0.120
Independent	2.247***	4.51	-0.134	-0.600	0.199	0.535	2.336***	4.14	-0.134	-0.615	0.179	0.569	2.300***	4.10	-0.134	-0.609	0.186	0.557
Right	3.091***	6.84	-0.150	-0.682	0.028	0.804	3.125***	6.94	-0.149	-0.684	0.021	0.812	3.099***	6.85	-0.149	-0.682	0.025	0.806
Woman	0.546*	1.81	-0.086	-0.082	0.127	0.041	0.504	1.64	-0.081	-0.073	0.117	0.036	0.515*	1.70	-0.082	-0.076	0.120	0.038
Age	-0.017	-1.60	0.004	0.001	-0.004	-0.001	-0.018*	-1.73	0.004	0.001	-0.004	-0.001	-0.018*	-1.73	0.004	0.001	-0.004	-0.001
Party Change	0.465*	1.90	-0.080	-0.057	0.106	0.030	0.428*	1.75	-0.074	-0.050	0.098	0.027	0.429*	1.75	-0.075	-0.051	0.098	0.027
chi2-stat energy resources	4.89						36.52***						35.56***					
Number of obs	233						233						233					
Prob>chi2	0.000						0.000						0.000					
Pseudo R2	0.325						0.325						0.325					

Notes: Robust standard errors. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Reference groups: Left, Man, Not changed the party, Not a member of Duma's energy policy committee. According to the Optimal Classification output, the algorithm converges to 0.02905 (3%) in error proportion, to 0.97095 (97%) in correct classification, to 0.87064 (66.2%) in APRE, and the Spearman correlation between the current legislator estimates and the previous iteration estimates converges to 0.99987.

Table 7

Probit Analysis of Roll Call Votes (No. 46300)

Second Duma – Parameter Estimates with Probit Roll Call Vote No. 46300, Clustering on Russian Regions									
Factors	Coeff.	z-Stat.	Marg. Eff.	Coeff.	z-Stat.	Marg. Eff.	Coeff.	z-Stat.	Marg. Eff.
Regional production as percentage of national production									
Oil	426.503**	2.26	0.068						
Gas	-283.973**	-2.32	-0.045						
Electricity	-13.987	-0.99	-0.002						
Regional production per capita									
Oil				271.971**	1.99	12.848	313.285*	1.90	13.982
Gas				-67.014	-0.87	-3.166	-73.593	-0.99	-3.284
Electricity				49342	0.91	2331			
all other variables included	YES			YES			YES		
chi2-stat energy resources	6.10			5.36			3.77		
Number of obs	342			342			342		
Pseudo R2	0.485			0.476			0.471		

Notes: Robust standard errors. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Reference groups: PR; All parties except Centre, Man, Not changed the party, Not a member of Duma's energy policy committee.

Table 8

Probit Analysis of Roll Call Votes (No. 129940)

Third Duma – Parameter Estimates with Probit Roll Call Vote No. 129940, Clustering on Russian Regions									
Factors	Coeff.	z-Stat.	Marg. Eff.	Coeff.	z-Stat.	Marg. Eff.	Coeff.	z-Stat.	Marg. Eff.
Regional production as percentage of national production									
Oil	10.187	1.06	3.771						
Gas	-1.271	-0.98	-0.470						
Electricity	17.329***	3.17	6.414						
Regional production per capita									
Oil				43.543	0.75	16.134	51.473	0.94	19.143
Gas				-1.465	-0.33	-0.543	-2.226	-0.52	-0.828
Electricity				50076***	2.67	18554			
all other variables included	YES			YES			YES		
chi2-stat energy resources	11.96***			18.43***			8.42**		
Number of obs	414			414			414		
Pseudo R2	0.312			0.310			0.299		

Notes: Robust standard errors. Significance levels: * $0.05 < p < 0.10$, ** $0.01 < p < 0.05$, *** $p < 0.01$. Reference groups: PR; All parties except Centre, Man, Not changed the party. Not a member of Duma's energy policy committee.

APPENDIX

Table A1
Political Parties in the State Duma of Russia between 1994 and 2003

First Duma	
Political Parties	**Proclaimed Ideology**
Choice of Russia	Right
Women of Russia	Centre
Agrarian Party of Russia	Left
Block "Yavlinskii-Boldyrev-Lukin"	Centre
Democratic Party of Russia	Right
Deputy Group "Russia"	Centre
Deputy Group "Stability"	Centre
Communist Party of Russia	Left
Liberal-Democratic Party of Russia	Right
New Regional Policy -Duma 96	Centre
Party of Russian Unity and Agreement	Right
Not affiliated with a fraction or grouping	Independent
Second Duma	
Political Parties	**Proclaimed Ideology**
Communist Party of Russia	Left
Liberal-Democratic Party of Russia	Right
Our Home-Russia	Centre
Yabloko	Centre
Agrarian Deputy Group	Left
Deputy Group "People's Power"	Left
Deputy Group "Russian Regions"	Centre
Not affiliated with a fraction or grouping	Independent
Third Duma	
Political Parties	**Proclaimed Ideology**
Communist Party of Russia	Left
Liberal-Democratic Party of Russia	Right
Fatherland-All Russia	Centre
Union of Right Forces	Right
Yabloko	Centre
Agrarian-Industrial Deputy Group	Left
Deputy Group "People's Deputy"	Centre
Deputy Group "Russian Regions"	Centre
Interregional Movement "Unity"	Centre
Not affiliated with a fraction or grouping	Independent

Table A2
Parliamentary Committees in the State Duma of Russia between 1994 and 2003

First Duma	Second Duma
Committee	**Committee**
1. Agrarian Issues	1. Agrarian Issues
2. Security	2. Security
3. Budget, Taxation, Banks and Finance	3. Budget, Taxation, Banks and Finance
4. Geopolitics	4. Geopolitics
5. Local Self-Government	5. Local Self-Government
6. Women, Family and Youth	6. Veterans
7. Nationalities	7. Women, Family and Youth
8. Social groupings and Religious Organizations	8. Nationalities
9. CIS affairs and contacts with compatriots	9. Social groupings and Religious Organizations
10. Federal and regional affairs	10. CIS affairs and contacts with compatriots
11. Legislation and judicial reform	11. Federal and regional affairs
12. Media policy	12. Legislation and judicial reform
13. International affairs	13. Media policy
14. Defence	14. Conversion and High Technologies
15. Education, culture and science	15. International affairs
16. Work organization of the State Duma	16. Culture
17. Health protection	17. Defence
18. Natural resources and the environment	18. Education and science
19. Industry, construction, transportation and energy	19. Problems of the North
20. Property, privatization and economic activity	20. Regulation and Work organization of the State Duma
21. Labour and social policy	21. Health protection
22. Ecology	22. Natural resources and the environment
23. Economic policy	23. Industry, construction, transportation and energy
	24. Property, privatization and economic activity
	25. Labour and social policy
	26. Ecology
	27. Economic policy
	28. Tourism and Sport
Third Duma	
Committee	
1. Agrarian Issues	
2. Security	
3. Budget, and Taxation	
4. State Construction	
5. Local Self-Government	
6. Veterans	
7. Women, Family and Youth	
8. Nationalities	
9. Social groupings and Religious Organizations	
10. CIS affairs and contacts with compatriots	
11. Federal and regional affairs	
12. Defence	
13. Legislation and judicial reform	
14. Mandate	
15. Credit	
16. Culture	
17. International Affairs	
18. Education and science	
19. Health protection	
20. Problems of the North	
21. Regulation and Work organization of the State Duma	
22. Natural resources and the environment	
23. Industry	
24. Energy	
25. Property, privatization and economic activity	
26. Labour and social policy	
27. Ecology	
28. Economic policy	
29. Media Policy	

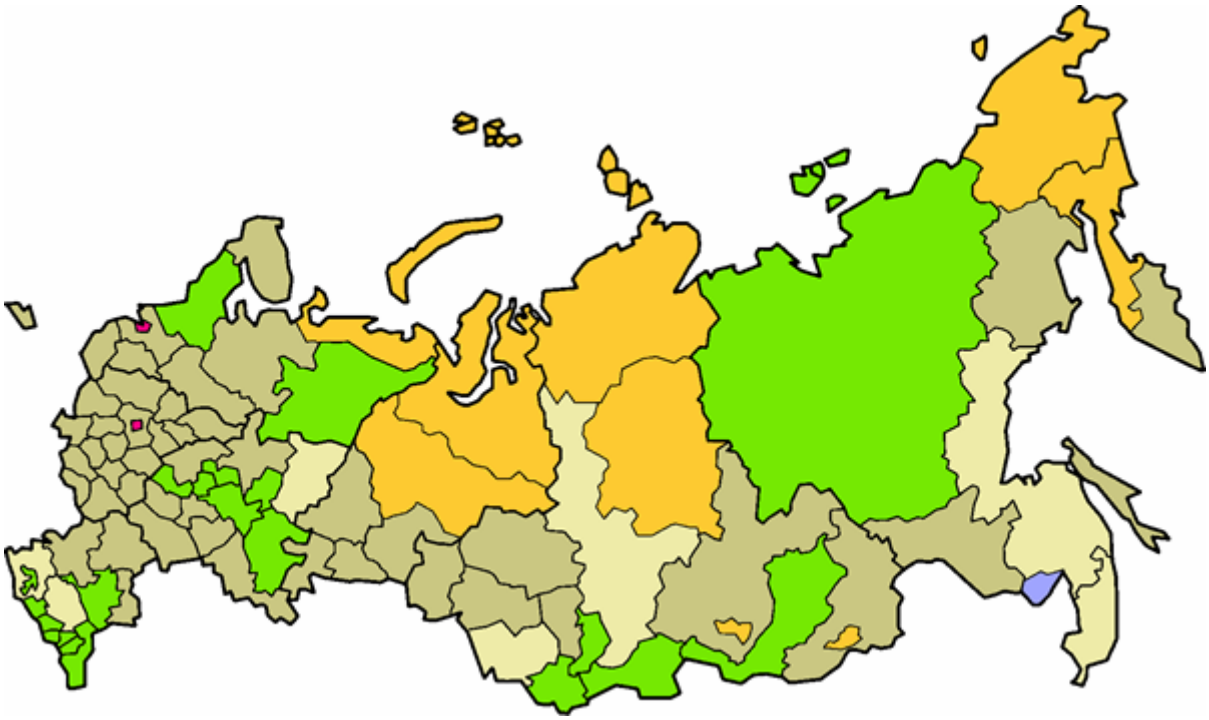
Table A3
Administrative Structure of Russian Federation: Districts, Republics, Krais and Oblasts (Part I)

North-western District	*Central District*	*Volga District*	*Southern District*
Arkhangel'skaya oblast'	Belgorodskaya oblast'	Republic Bashkortostan	Republic Adygeya
Vologodskaya oblast'	Bryanskaya oblast'	Kirovskaya oblast'	Astrakhanskaya oblast'
Kaliningradskaya oblast'	Vladimirskaya oblast'	Komi-Permyatskii AO	Volgogradskaya oblast'
Republic Karelia	Voronezhskaya oblast'	Nizhegorodskaya oblast'	Republic Dagestan
Republic Komi	Ivanovskaya oblast'	Orenburgskaya oblast'	Republic Ingushetiya
Leningradskaya oblast'	Kaluzhskaya oblast'	Penzenskaya oblast'	Kabardino-Balkarskaya Republic
Murmanskaya oblast'	Kostromskaya oblast'	Permskaya oblast'	Republic Kalmykiya
Nenetskii AO	Kurskaya oblast'	Republic Marii El	Karachaevo-Cherkesskaya Republic
Novgorodskaya oblast'	Lipetskaya oblast'	Republic Mordoviya	Krasnodarskii Krai
Pskovskaya oblast'	Moskovskaya oblast'	Samarskaya oblast'	Rostovskaya oblast'
City of St. Petersburg	Orlovskaya oblast'	Saratovskaya oblast'	Republic Severnaya Ossetiya
	Ryazanskaya oblast'	Republic Tatarstan	Stavropol'skii Krai
	Smolenskaya oblast'	Udmurtskaya Republic	Chechenskaya Republic
	Tambovskaya oblast'	Ul'yanovskaya oblast'	
	Tverskaya oblast'	Chuvashskaya Republic	
	Tul'skaya oblast'		
	Yaroslavskaya oblast'		
	City of Moscow		

Table A4
Administrative Structure of Russian Federation: Districts, Republics, Krais and Oblasts (Part II)

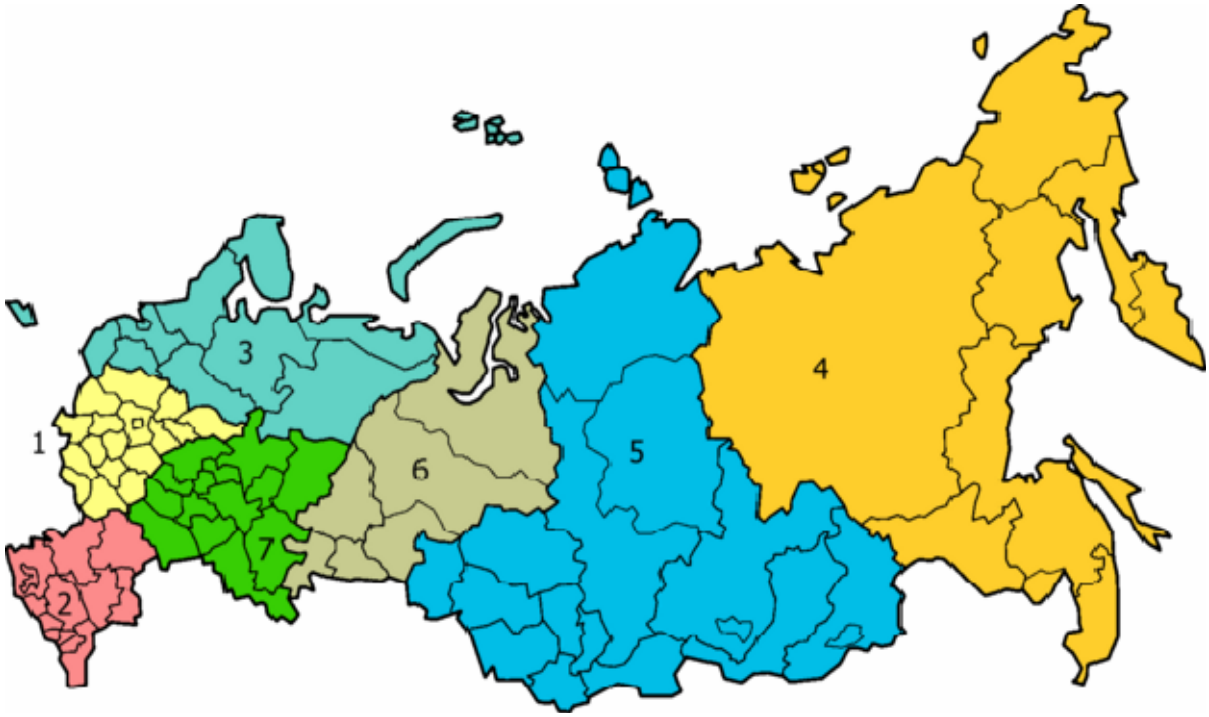
Ural District	*Siberian District*	*Far Eastern District*
Kurganskaya oblast'	Aginskii Buryatskii AO	Amurskaya oblast'
Sverdlovskaya oblast'	Republic Altai	Evreiskaya AR
Tyumenskaya oblast'	Altaiskii Krai	Kamchatskaya oblast'
Chelyabinskaya oblast'	Republic Buryatiya	Koryakskii AO
Khanty-Mansiiskii AO	Irkutskaya oblast'	Koryakskii AO
Yamalo-Nenetskii AO	Kemerovskaya oblast'	Magadanskaya oblast'
	Krasnoyarskii Krai	Chukotskii AO
	Novosibirskaya oblast'	Primorskii Krai
	Omskaya oblast'	Sakhalinskaya oblast'
	Taimyrskii AO	Khabarovskii Krai
	Tomskaya oblast'	Republic Sakha (Yakutiya)
	Republic Tyva	
	Ust'-Ordynskii AO	
	Republic Khakasiya	
	Chitinskaya oblast'	
	Evenkiiskii AO	

Figure A1
Political Map of Russian Federation: Federal Subjects (Russian Regions)



Source: www.novayagazeta.ru

Figure A2
Political Map of Russian Federation: Federal Administrative Districts



Source: http://wgeo.ru/russia/fedokr.shtml

Notes

[i] The information on energy roll calls between 1994 and 2003 relies on INDEM database materials and personal research in the archives of central Russian newspapers and journals. INDEM (Informatics for Democracy) is a non-profit organization of applied political research located in Moscow and its database includes all roll call votes held in the State Duma since its constitutional establishment in December 1993.

[ii] This information is based on the summary of the respective plenary session, as it is provided by the INDEM database.

[iii] Id.

[iv] Id.

[v] Id.

[vi] Id.

[vii] Id.

[viii] Id.

[ix] Id.

[x] Besides this restriction we have some missing values for one of the independent variable (age) in the second (19 observations) and Third Duma (5 observations). The obtained results remain robust when omitting the age variable in the estimations.

[xi] The quantitative information on regional energy production comes from the Federal Service of Statistics, known as Goskomstat. This is the official state provider of statistical information in Russian Federation. In this paper we use the 2003 and the 2007 editions of the statistical package on Russian Regions.

[xii] Please see Tables A3, Parts I and II, in the appendix below.

[xiii] We slightly changed the structure of the specification due to the non-linear relationship between age and ranking.